

Claims

1. A perforation gun having an outer gun barrel (1),  
arranged in the interior of which there are  
perforators (10) that can be ignited by way of a  
5 fuse (11) leading through the gun barrel (1) and after  
ignition pierce the gun barrel (1) at penetration  
holes (13), wherein means are provided for the  
automatic closure of the penetration holes (13),  
characterised in that the means for the automatic  
10 closure comprise cartridges with a swellable two-  
component foam and these cartridges are arranged in  
the gun barrel (1) and can be broken up by means of  
the ignited fuse (11), as a result of which foam  
emerges out of the cartridges, swells up and blocks  
15 the penetration holes (13).
2. A perforation gun according to claim 1, characterised  
in that a cartridge is arranged next to each  
perforator (10).
3. A perforation gun having an outer gun barrel (1),  
20 arranged in the interior of which there are  
perforators (10) that can be ignited by way of a  
fuse (11) leading through the gun barrel (1) and after  
ignition pierce the gun barrel (1) at penetration  
holes (13), wherein means are provided for  
25 automatically closing the penetration holes (13), and  
these means comprise a sliding tube (4) which can be  
displaced by means of an adjusting arrangement by at  
least the diameter of the penetration hole (13) after  
the penetration, characterised in that the sliding  
30 tube (4) is arranged coaxially between the  
perforators (10) and the gun barrel (1).
4. A perforation gun according to claim 3, characterised  
in that the sliding tube (4) is fixed in its starting  
position by way of a securing element (7) that breaks

up after ignition of the fuse (11) and enables the displacement of the sliding tube (4).

5. A perforation gun according to claim 3 or 4,  
characterised in that the adjusting arrangement is a  
5 tensioned spring.
6. A perforation gun according to one of claims 3 to 5,  
characterised in that the adjusting arrangement is a  
pyrotechnic element that can be ignited by means of  
the fuse (11).
- 10 7. A perforation gun according to one of claims 3 to 6,  
characterised in that the sliding tube (4) is closed  
on the side to which it is to be displaced and is open  
on the other side and as a result can be displaced  
like a plunger by means of the pressure building up as  
15 a result of the ignition of the perforators (10).
8. A perforation gun according to one of claims 3 to 7,  
characterised in that the sliding tube (4) has a wall  
thickness that permits radial expansion and thus  
fixation in the gun barrel (1) after the sliding  
20 tube (4) has been displaced as a result of the  
pressure that has built up in the gun barrel (1) after  
the ignition of the perforators (10).
9. A perforation gun according to one of claims 3 to 8,  
characterised in that a fluid is arranged between the  
25 sliding tube (4) and the gun barrel (1).